

## **ABSTRACT OF THE DISCLOSURE**

The present invention discloses a system and method for designing a digital television network by utilizing a wireless network design program and applying information from an existing analog television transmitting station. The system and method determine an optimum power for a digital television transmitting station by conducting a regression analysis. The system and method also calculate a coverage zone of a digital television using the optimum power for the digital television transmitting station and corresponding parameters thereof. Advantageously, the disclosed system and method maintain the network figure and the coverage zone of the existing analog television. Thus, influences and interferences with other networks are minimized.